

REMARKS

Support

Applicants have amended claim 1 by replacing the term “consisting essentially of” with “comprising” and by removing the text added to claims 1 and 11 by the amendments dated September 4, 2007. This restores the claims to those filed by Applicants on June 11, 2007. Support for these amendments is found in the previous version of the claims themselves as well as the specification.

Applicants have now amended claims 1 and 11 to further specify that the grease composition of the present invention has water wash off properties. Support for this amendment is found on page 3, lines 6-11 of the specification.

Applicants have also amended claims 1 and 11 to further specify that the polymer of the grease composition is free of non-monomeric amines with primary functionality, secondary functionality or mixtures thereof. Support for this amendment is found on page 9, lines 8-9, where the amine is listed as an optional component in the polymer. Support also comes from page 10, lines 16-20, where the amount of the amine present is listed as 0 to about 1 wt %, clearly showing that having 0 wt % amine present with the polymer is an embodiment of the invention. Support also come from page 10, lines 21-24 where it is stated that the polymer may be free of Mannich base functionality, which is defined as being derived from at least one non-monomeric amine with primary functionality, secondary functionality or mixtures thereof. Therefore, as the specification makes it clear that the polymer may be free of Mannich base functionality; that Mannich base functionality is derived from a reaction including at least one non-monomeric amine with primary functionality, secondary functionality or mixtures thereof; that the polymer can have a 0 wt% amine content, the amendment to claims 1 and 11 is fully supported by the specification.

Response

The Examiner has rejected claim 1-8 and 11 as obvious over Tipton (US 5,354,485) in view of Lange (US 6,258,761). Applicants respectfully disagree. Neither Tipton nor Lange have any teachings on or disclosures of water wash off properties. As previously addressed, Lange does not teach the thickening agent of the present invention. In the present invention, elements (a) and (b) of the claim are an

esterified polymer and a thickening agent respectively. The thickening agents are different elements providing the grease with different properties. The thickener provides the grease with non-Newtonian properties. The esterified polymer provides the grease with water repellence and/or water wash-off properties. This is confirmed in the previously filed declaration submitted by Sivik on June 11, 2007.

Tipton is focused on compositions that contain organic ammonium thiosulfates, and mention greases only so far as indicating grease compositions may include the ammonium thiosulfates of the invention. The Examiner notes that Tipton discloses that esters of styrene-maleic anhydride copolymers are included within its polymeric dispersants. Applicants point out that this teaching is limited to additional components that may be combined with the organic ammonium thiosulfates of Tipton (see col 20, lines 42-51 of Tipton). Tipton indicates that these various additional additives may be combined with its thiosulfates and provides no teaching of any advantage or benefit of using a styrene-maleic anhydride copolymer, or in fact any of the "Other Additives" listed. The Examiner also notes that Tipton provides one example that contains a styrene-maleic anhydride copolymer. Example IX includes 1 wt % of a maleic anhydride-styrene copolymer esterified with C8-18 and C4 alcohols and post-treated with aminopropyl morpholine. Applicants note that this post-treated, (i.e. amine treated) polymer is the only example provided by the Tipton and Tipton provides no teachings on the use of amine-treated and non-amine-treated polymers other than providing an example using a post-treated polymer.

Applicants also note that while Tipton provides some teachings on the use of its additives in both lubricating oil compositions and grease compositions, the example using the maleic anhydride-styrene copolymer is a lubricant oil, not a grease, and Tipton provides no teaching or motivation on the use of maleic anhydride-styrene copolymers in greases. Tipton rather teaches the use of its organic ammonium thiosulfates in greases as well as lubricating oils.

Therefore, one skilled in the art at the time the invention was filed, based on Tipton, would have no reason or motivation to use a non-post-treated maleic anhydride-styrene copolymer, and furthermore, would have no motivation to use the maleic anhydride-styrene copolymer (post-treated or not) in a grease composition. The Examiner may be right that Tipton shows it may have been possible for one skilled in

the art at the time to use a maleic anhydride-styrene copolymer in a grease composition, Tipton, either alone or in combination with Lange, provides no motivation toward using a maleic anhydride-styrene copolymer in a grease. Therefore, Applicants respectfully submit that an obviousness rejection is not appropriate based on this reference and the current rejections should be removed.

In addition, the present invention specifies that its polymer is free of non-monomeric amines with primary functionality, secondary functionality, or mixtures thereof. The aminopropyl morpholine of the example in Tipton falls within this group excluded by the current claims. The current claims also specify that the resulting grease composition has water wash off properties, to which Tipton provides no teaching at all. For these reasons the present invention is both novel and non-obvious over Tipton, either alone or in combination with Lange.

Therefore, the present invention is both novel and non-obvious over each of the cited references, alone or in combination. Applicants respectfully ask that the Examiner remove the rejections and find the claims allowable. If for any reason the Examiner believes that a telephone conference would expedite the prosecution of this application, I can be reached at the telephone number listed below.

The Commissioner is authorized to charge any required fees or credit any overpayment of fees to The Lubrizol Corporation Deposit Account No. 12-2275.

Respectfully submitted,

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